

BEFORE

THE PUBLIC SERVICE COMMISSION

OF

SOUTH CAROLINA

DOCKET NO. 2012-90-E

In Re: Petition of South Carolina)	<u>PETITION FOR UPDATES AND</u>
Electric & Gas Company for Updates)	<u>REVISIONS TO THE CAPITAL</u>
and Revisions to Schedules Related to)	<u>COST SCHEDULE AND THE</u>
the Construction of a Nuclear Base Load)	<u>CONSTRUCTION SCHEDULE</u>
Generation Facility at Jenkinsville,)	
South Carolina)	

South Carolina Electric & Gas Company ("SCE&G" or the "Company") hereby petitions the Public Service Commission of South Carolina (the "Commission") for an order approving an updated capital cost schedule and updated construction schedule for the construction of two 1,117 net megawatt nuclear units (the "Units") to be located at the V. C. Summer Nuclear Station site near Jenkinsville, South Carolina. This petition is filed pursuant to the provisions of the Base Load Review Act ("BLRA"), S.C. Code Ann. § 58-33-270(E) (Supp. 2011). In accordance with the provisions of the BLRA, SCE&G would respectfully show to the Commission the following:

I. INTRODUCTION

1. SCE&G is a corporation duly organized and existing under the laws of the State of South Carolina, with its principal offices at 220 Operation Way, Cayce, South Carolina 29033.

2. SCE&G is engaged in the business of generating, transmitting, and delivering electricity and providing electric service to the public for compensation. SCE&G owns and operates an integrated electric utility system that serves over 660,000 customers in 24 counties in central and southern South Carolina.

3. Corporate legal counsel for SCE&G in this proceeding are as follows:

K. Chad Burgess
Matthew W. Gissendanner
South Carolina Electric & Gas Company
Mail Code C222
220 Operation Way
Cayce, SC 29033
(803) 217-8141
chad.burgess@scana.com
matthew.gissendanner@scana.com

Private legal counsel for SCE&G in this proceeding are as follows:

Belton T. Zeigler
Gary Pope, Jr.
Pope Zeigler, LLC
P.O. Box 11509
Columbia, SC 29211
(803) 354-4949
bzeigler@popezeigler.com
gpopejr@popezeigler.com

All correspondence and any other matters relative to this proceeding should be addressed to these representatives.

II. PRIOR BLRA ORDERS

4. In Docket No. 2008-196-E, SCE&G sought approval of a Combined Application for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order for the Construction and Operation of a

Nuclear Facility in Jenkinsville, South Carolina for the Units. Pursuant to S.C. Code Ann. § 58-33-250(2), SCE&G provided the anticipated construction schedule and anticipated capital cost schedule for the Units.

5. Those schedules indicated that the Units could be constructed for a total cost to SCE&G of approximately \$4.5 billion in 2007 dollars.¹

6. Following a full hearing on the Combined Application, the Commission issued Order No. 2009-104(A), which approved the proposed construction schedule and capital cost schedule for the Units.

7. In Order No. 2010-12, dated January 22, 2010, the Commission approved SCE&G's request to update the construction schedule for the project and to update the capital cost schedule to reflect resulting changes in the forecasted timing of cash flow. The updated capital cost schedule did not alter the total estimated capital cost for the Units of approximately \$4.5 billion in 2007 dollars.

8. In Order No. 2011-345, the Commission approved the Company's request to update capital cost projections for the project to reflect current estimates. Additionally, in keeping with the decision by the Supreme Court of South Carolina in South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm'n, 388 S.C. 486, 697 S.E.2d 587 (2010), SCE&G removed all contingency amounts from the capital cost schedule. Order No. 2011-345 established a total estimated capital cost for the Units of approximately \$4.3 billion in 2007 dollars.

¹ Unless otherwise noted, all amounts reflect SCE&G's portion of the cost of the Units in 2007 dollars.

III. CURRENT UPDATE REQUEST

9. Since the issuance of Order No. 2011-345, SCE&G has continued to revise and update its construction schedules and capital cost schedules as new information has emerged.

A. Updated Construction Schedule

10. In early 2012, the United States Nuclear Regulatory Commission (the “NRC”) is expected to issue a combined operating license (“COL”) for the Units. This anticipated COL issuance date is a number of months later than the issuance date on which the construction schedule and capital cost schedule approved in Order Nos. 2009-104(A); 2010-12; and 2011-345 were based (“COL Delay”). As a result, the construction schedule must be modified to accommodate the COL Delay. **Exhibit 1** attached to this filing provides an updated construction milestone schedule for the project reflecting the aligning of all milestones to current construction and fabrication schedules.

B. Updated Cost Forecasts

i. Change Orders

11. **Cyber Security** – In late 2011, an agreement was reached between SCE&G and Westinghouse Electric Company, LLC (“WEC”) and the Shaw Group (“Shaw”) (collectively, “WEC/Shaw”) on a phased approach for ascertaining the costs that will be associated with strengthening the Units’ defenses against cyber attacks (“Cyber Security”). The Phase I scope of the Cyber Security plan will involve review of the specific equipment and software that will be used in the Units to identify potential

vulnerabilities to cyber attack and to devise a scope of work to protect against those vulnerabilities. Phase I of the work will be undertaken for a price of \$914,422 which is principally a firm price with certain non-firm time and materials components. Phase II will involve the actual software programming and other work necessary to overcome the vulnerabilities identified in Phase I. The cost of Phase II is estimated to be approximately \$4.95 million.

12. **Waste Water Piping** – On December 9, 2011, WEC/Shaw presented SCE&G with an estimate for a detailed scope of work and associated costs for a revision to the design of the waste water discharge piping for gravity drainage to the Waste Water System Discharge Piping, as specified in SCE&G's COL application. SCE&G currently is reviewing this proposal from WEC/Shaw. WEC/Shaw has determined that the cost of this work will be \$8,250.

13. **Health Care Costs** – During the last quarter of 2011, WEC/Shaw initiated Change Order No. 12 requesting reimbursement for Shaw's increased costs as a result of a change in law related to portions of the Health Care and Education Reconciliation Act of 2010 ("Health Care Act"). SCE&G approved the change order in December 2011. The total costs associated with this action are \$135,573 and are spread throughout the remaining period of the project. At this time, WEC has not quantified any additional costs related to this act. Additional change orders may be generated by WEC or by Shaw to cover future cost impacts associated with the Health Care Act.

ii. Owners Costs

14. During 2011 and 2012, SCE&G's leadership conducted an intensive review of the staffing required to effectively operate the Units. This work has resulted in revised staffing plans and revised Owners costs estimates to replace the prior estimates of Owners costs.

15. As a result of this review, SCE&G has updated the project hiring plan for New Nuclear Deployment ("NND") Construction Oversight and Operational Readiness staffs to reflect the additional skills, training and experience that will be required to staff the Units in a way that will ensure that they can be operated safely and efficiently when construction is complete. SCE&G has also increased construction oversight staffing to provide for additional quality assurance and quality control ("QA/QC") resources to oversee the QA/QC programs of its contractors and suppliers which is a regulatory responsibility of SCE&G as owner of the Units. Oversight of QA/QC for the project has been identified as a key goal for NND during the construction process. In addition, operational staffing of the Units has increased due to rulemakings anticipated by the NRC as a result of the safety reviews undertaken in light of the Fukushima earthquake. Also included in these cost updates are the updated estimates of the cost of training, and other facilities, information technology ("IT") systems and the related infrastructure equipment required to support the Units and their personnel. This updating of NND and Operational Readiness costs has resulted in an increase in the forecast for Owners Costs for the Units of approximately \$137 million.

iii. Transmission Costs

16. SCE&G has re-forecasted transmission costs associated with the Units based on additional design and engineering work, updated evaluations of power flows, and more complete information about right-of-way and property requirements. In this regard:

(a) SCE&G has determined that it is preferable to construct a new Saluda River 230/115 kilovolt ("kV") Substation as opposed to installing additional autobanks at the Lake Murray 230/115 kV Substation and the Denny Terrace 230/115 kV Substation. Accommodating power flows from the Units under this new configuration will require upgrading the 115 kV line between the Saluda River substation and the Lyles substation and other improvements.

(b) SCE&G has decided to move from overhead to underground a section of the existing Parr-VCSN Safeguard 115 kV line where that line will be crossed by multiple new lines being built to support the Units. Undergrounding this segment of the line will enhance the safety and reliability of power supplies to the Units and will represent a new cost to the project.

(c) Right-of-way constraints along the VCSN-Killian 230 kV Line have required redesigns of the line and the placement of additional structures to accommodate narrower right-of-way corridors that exist in some locations.

As a result of these and other changes and upgrades, transmission cost forecasts have increased by approximately \$12.3 million.

C. Revised Capital Cost Schedules

17. **Exhibit 2** attached to this filing provides the Commission with an updated capital cost schedule for the Units.

18. As set forth in **Exhibit 2**, the updated capital cost schedule in 2007 dollars is approximately \$4.4 billion, which reflects an increase of approximately \$155 million in the costs approved in Order No. 2011-345.

19. For ease of reference, **Exhibit 3** provides information showing the variation between the capital cost schedule approved by the Commission in Order No. 2011-345 and the capital cost schedule contained in **Exhibit 2**.

20. The updated capital cost schedule set forth in **Exhibit 2** also reflects the most current inflation indices applied as mandated by the Commission in Order No. 2009-104(A). The updated capital cost schedule in future dollars, including Allowance for Funds Used During Construction, is approximately \$5.8 billion which is approximately \$17 million less than the similar forecast of costs and escalation reflected in Order No. 2011-345.

21. **Exhibit 4** provides a reconciliation of the changes in forecasted costs shown on **Exhibit 2** to those approved in Order No. 2011-345. Also shown is a comparison of the escalation indices in effect under Order No. 2011-345 to those currently in effect.

D. Conclusion as to Updated Construction and Capital Cost Schedules

22. Pursuant to S.C. Code Ann. § 58-33-270(E), when a utility petitions for adjustments in the construction schedule or capital cost schedule for a project being constructed under the BLRA, the Commission “shall grant the relief requested if, after a hearing, the commission finds: (1) as to the changes in the schedules, estimates, findings, or conditions, that the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility”

23. The construction schedule and capital costs reflected in **Exhibit 1** and **Exhibit 2** are the result of normal and prudent revisions, changes and refinements in the construction program for the project.

24. The capital cost schedule contained in **Exhibit 2** contains no contingencies or other provisions for the additional capital costs that may be identified and reclassified to specific items of cost in the future as construction of the Units proceeds. For that reason, SCE&G reserves the right to update this schedule during the pendency of this proceeding as cost forecasts are updated and supplemented. Specifically, SCE&G intends to update the cost schedules attached hereto with new cost schedules when it receives updated cash flow schedules from WEC/Shaw.

25. SCE&G will continue to monitor and evaluate the construction schedule and schedule of capital costs. To the extent future revisions or updating of **Exhibit 1** or **Exhibit 2** or other revisions under S.C. Code Ann. § 58-33-270(E) are required, SCE&G will propose such changes for review by the Commission, either through updating **Exhibit 1** and **Exhibit 2** during this proceeding or through future filings and proceedings.

IV. ACCOUNTING ORDER REQUEST

26. SCE&G has informed WEC/Shaw that in response to the COL Delay and other commercial issues related to progress of the construction, SCE&G has decided that the substantial completion date for Unit 2 should be delayed to December 31, 2016. SCE&G has also requested that the substantial completion date for Unit 3 be advanced to provide for closer synchronization of the construction schedules for the two Units in order to partially offset costs associated with the COL Delay through increased construction efficiencies. SCE&G has asked WEC/Shaw to re-baseline the construction schedule and cash flow forecast for the project assuming such a scenario.

27. Updated cash flow schedules and construction milestone schedules based on the new substantial completion dates for the Units will be filed as an update to the schedules attached to this Petition as soon as they are finalized.

28. During the COL review process, the nuclear systems supplier for the Units, WEC, made certain design changes in the AP1000 Unit.

(a) One such change related to a redesign of the shield building for the Units. This change ("Shield Building Redesign") was undertaken to increase the shield building's resistance to aircraft impact.

(b) Another change related to an increase in the thickness of steel plates used in constructing certain structures that will be built and installed using modular construction techniques during the construction of the Units. This change ("Module Redesign") was undertaken to strengthen the modules.

WEC/Shaw indicates that the Shield Building Redesign and the Module Redesign will increase the cost of constructing the Units.

29. In addition, excavation and mapping of the rock conditions in the basement area for Unit 2 has discovered that in certain areas the bedrock is located deeper than test borings had indicated. This condition ("Unit 2 Rock Conditions") will require removal of additional material from the excavated area and the placement of additional concrete and other engineered materials in the resulting spaces. Discovering such conditions is not unusual in a project of this kind, but addressing these conditions may increase construction costs.

30. WEC/Shaw has indicated to SCE&G that it considers the costs associated with Shield Building Redesign, the Module Redesign, the COL Delay and the Unit 2 Rock Conditions to be costs that it is entitled to recover as additional compensation under the Engineering, Procurement and Construction Agreement ("EPC Contract") for the project. SCE&G is challenging these claims ("Challenged Costs").

31. Under the terms of the EPC Contract, SCE&G is required to pay the Challenged Costs subject to refund with interest to the extent that the claims concerning them are resolved in SCE&G's favor.

32. As a result, SCE&G proposes the following:

(a) That in future reporting under S.C. Code Ann. § 58-33-277(A)(4), the Commission allow SCE&G to show the capital cost schedule for the project both before and after adjustment to remove Challenged Costs from the actual and forecasted costs of the project.

(b) That under S.C. Code Ann. §§ 58-33-277(A)(4), 58-33-275(C) and for all other purposes under the BLRA, the project costs as adjusted to remove Challenged Costs shall be the costs against which compliance with Commission-approved cost schedules for the project shall be measured until issues related to Challenged Costs are resolved.

(c) Under S.C. Code Ann. § 58-33-280(B), SCE&G will not include any Challenged Costs in the costs for which it seeks revised rates recovery until issues related to those Challenged Costs are resolved and those costs have been presented to the Commission for review. This will allow the Commission to review the prudence of Challenged Costs fully at the time revised rates recovery for them is sought.

V. PRAYER FOR RELIEF

WHEREFORE, South Carolina Electric & Gas Company respectfully requests that the Commission set the current matter for hearing and thereafter, pursuant to S.C. Code Ann. § 58-33-270(E),

- A. Approve the updated construction schedule attached as **Exhibit 1**, and the updated capital cost schedule attached as **Exhibit 2**, as they may be amended during the pendency of this proceeding, to be the operative schedule for construction of the Units under S.C. Code Ann. § 58-33-275(A),
- B. Enter an accounting order allowing SCE&G in reporting costs for the project under S.C. Code Ann. § 58-33-277(A)(4) and for all other purposes under the

BLRA to deduct Challenged Costs from the cost of the project and to hold them outside of project capital cost for future review and approval in revised rates filings or other ratemaking proceedings, and

C. Grant other relief as may be appropriate.

Respectfully submitted,



K. Chad Burgess
Matthew W. Gissendanner
South Carolina Electric & Gas Company
Mail Code C222
220 Operation Way
Cayce, SC 29033
(803) 217-8141
chad.burgess@scana.com
matthew.gissendanner@scana.com

Belton T. Zeigler
Gary Pope Jr
Pope Zeigler, LLC
P.O. Box 11509
Columbia, SC 29211
(803) 354-4949
bzeigler@popezeigler.com
gpopejr@popezeigler.com

Attorneys for South Carolina Electric & Gas Company

Cayce, South Carolina

Date: February 29, 2012

LIST OF EXHIBITS

EXHIBIT 1 – An updated milestone schedule for the Units.

EXHIBIT 2 – An updated capital cost schedule for the Units which if approved will replace Exhibit F of the original Combined Application for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order for the Construction and Operation of a Nuclear Facility in Jenkinsville, South Carolina, as approved in Order No. 2009-104(A) and as updated in Order Nos. 2010-12, and 2011-345.

EXHIBIT 3 – A schedule showing the variation between the capital cost schedule approved by the Commission in Order No. 2011-345 and the capital cost schedule contained in **Exhibit 2**.

EXHIBIT 4 – A schedule showing the reconciliation of the gross construction dollars shown in **Exhibit 2** to those approved by the Commission in Order No. 2011-345. Also shown is a comparison of the escalation indices in effect under Order No. 2011-345 to those currently in effect.

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
1	Approve Engineering Procurement and Construction Agreement	Complete	
2	Issue P.O.'s to nuclear component fabricators for Units 2 and 3 Containment Vessels	Complete	
3	Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - First Payment - Unit 2	Complete	
4	Contractor Issue PO to Accumulator Tank Fabricator - Unit 2	Complete	
5	Contractor Issue PO to Core Makeup Tank Fabricator - Units 2 & 3	Complete	
6	Contractor Issue PO to Squib Valve Fabricator - Units 2 & 3	Complete	
7	Contractor Issue PO to Steam Generator Fabricator - Units 2 & 3	Complete	
8	Contractor Issue Long Lead Material PO to Reactor Coolant Pump Fabricator - Units 2 & 3	Complete	
9	Contractor Issue PO to Pressurizer Fabricator - Units 2 & 3	Complete	
10	Contractor Issue PO to Reactor Coolant Loop Pipe Fabricator - First Payment - Units 2 & 3	Complete	
11	Reactor Vessel Internals - Issue Long Lead Material PO to Fabricator - Units 2 and 3	Complete	
12	Contractor Issue Long Lead Material PO to Reactor Vessel Fabricator - Units 2 & 3	Complete	
13	Contractor Issue PO to Integrated Head Package Fabricator - Units 2 & 3	Complete	
14	Control Rod Drive Mechanism Issue PO for Long Lead Material to Fabricator - Units 2 and 3 - first payment	Complete	

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
15	Issue P.O.'s to nuclear component fabricators for Nuclear Island structural CA20 Modules	Complete	
16	Start Site Specific and balance of plant detailed design	Complete	
17	Instrumentation & Control Simulator - Contractor Place Notice to Proceed - Units 2 & 3	Complete	
18	Steam Generator - Issue Final PO to Fabricator for Units 2 and 3	Complete	
19	Reactor Vessel Internals - Contractor Issue PO for Long Lead Material (Heavy Plate and Heavy Forgings) to Fabricator - Units 2 & 3	Complete	
20	Contractor Issue Final PO to Reactor Vessel Fabricator - Units 2 & 3	Complete	
21	Variable Frequency Drive Fabricator Issue Transformer PO - Units 2 & 3	Complete	
22	Start clearing, grubbing and grading	Complete	
23	Core Makeup Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	
24	Acumulator Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	
25	Pressurizer Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	
26	Reactor Coolant Loop Pipe - Contractor Issue PO to Fabricator - Second Payment - Units 2 & 3	Complete	
27	Integrated Head Package - Issue PO to Fabricator - Units 2 and 3 - second payment	Complete	
28	Control Rod Drive Mechanisms - Contractor Issue PO for Long Lead Material to Fabricator - Units 2 & 3	Complete	
29	Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - Second Payment - Units 2 & 3	Complete	

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
30	Start Parr Road intersection work.	Complete	
31	Reactor Coolant Pump - Issue Final PO to Fabricator - Units 2 and 3	Complete	
32	Integrated Heat Packages Fabricator Issue Long Lead Material PO - Units 2 & 3	Complete	
33	Design Finalization Payment 3	Complete	
34	Start site development	Complete	
35	Contractor Issue PO to Turbine Generator Fabricator - Units 2 & 3	Complete	
36	Contractor Issue PO to Main Transformers Fabricator - Units 2 & 3	Complete	
37	Core Makeup Tank Fabricator Notice to Contractor Receipt of Long Lead Material - Units 2 & 3	Complete	
38	Design Finalization Payment 4	Complete	
39	Turbine Generator Fabricator Issue PO for Condenser Material - Unit 2	Complete	
40	Reactor Coolant Pump Fabricator Issue Long Lead Material Lot 2 - Units 2 & 3	Complete	
41	Passive Residual Heat Removal Heat Exchanger Fabricator Receipt of Long Lead Material - Units 2 & 3	Complete	
42	Design Finalization Payment 5	Complete	
43	Start erection of construction buildings, to include craft facilities for personnel, tools, equipment; first aid facilities; field offices for site management and support personnel; temporary warehouses; and construction hiring office.	Complete	
44	Reactor Vessel Fabricator Notice to Contractor of Receipt of Flange Nozzle Shell Forging - Unit 2	Complete	

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
45	Design Finalization Payment 6	Complete	
46	Instrumentation and Control Simulator - Contractor Issue PO to Subcontractor for Radiation Monitor System - Units 2 & 3	Complete	
47	Reactor Vessel Internals - Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	Complete	
48	Turbine Generator Fabricator Issue PO for Moisture Separator Reheater/Feedwater Heater Material - Unit 2	Complete	
49	Reactor Coolant Loop Pipe Fabricator Acceptance of Raw Material - Unit 2	Complete	
50	Reactor Vessel Internals - Fabricator Start Weld Neutron Shield Spacer Pads to Assembly - Unit 2	11/30/2012	Unit 2
51	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 2	Complete	
52	Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 2	Complete	
53	Start excavation and foundation work for the standard plant for Unit 2	Complete	
54	Steam Generator Fabricator Notice to Contractor of Receipt of 2nd Steam Generator Tubesheet Forging - Unit 2	Complete	
55	Reactor Vessel Fabricator Notice to Contractor of Outlet Nozzle Welding to Flange Nozzle Shell Completion - Unit 2	Complete	
56	Turbine Generator Fabricator Notice to Contractor Condenser Fabrication Started - Unit 2	Complete	

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
57	Complete preparations for receiving the first module on site for Unit 2.	Complete	
58	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Transition Cone Forging - Unit 2	Complete	
59	Reactor Coolant Pump Fabricator Notice to Contractor of Manufacturing of Casing Completion - Unit 2	Complete	
60	Reactor Coolant Loop Pipe Fabricator Notice to Contractor of Machining, Heat Treating & Non-Destructive Testing Completion - Unit 2	2/29/2012	Unit 2
61	Core Makeup Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 2	5/31/2012	Unit 2
62	Polar Crane Fabricator Issue PO for Main Hoist Drum and Wire Rope - Units 2 & 3	Complete	
63	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 3	Complete	
64	Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 2	4/30/2012	Unit 2
65	Start placement of mud mat for Unit 2	3/8/2012	Unit 2
66	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Tubing - Unit 2	Complete	
67	Pressurizer Fabricator Notice to Contractor of Welding of Upper and Intermediate Shells Completion - Unit 2	Complete	
68	Reactor Vessel Fabricator Notice to Contractor of Closure Head Cladding Completion - Unit 3	2/29/2012	Unit 3

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
69	Begin Unit 2 first nuclear concrete placement	5/1/2012	Unit 2
70	Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 2	Complete	
71	Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	Complete	
72	Steam Generator Fabricator Notice to Contractor of Completion of 1st Steam Generator Tubing Installation - Unit 2	2/29/2012	Unit 2
73	Reactor Coolant Loop Pipe - Shipment of Equipment to Site - Unit 2	6/30/2013	Unit 2
74	Control Rod Drive Mechanism - Ship Remainder of Equipment (Latch Assembly & Rod Travel Housing) to Head Supplier - Unit 2	6/30/2012	Unit 2
75	Pressurizer Fabricator Notice to Contractor of Welding of Lower Shell to Bottom Head Completion - Unit 2	Complete	
76	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 2	5/31/2012	Unit 2
77	Design Finalization Payment 14	Complete	
78	Set module CA04 for Unit 2	7/25/2012	Unit 2
79	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Final Post Weld Heat Treatment - Unit 2	Complete	
80	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Completion of Tubing - Unit 2	3/31/2012	Unit 2

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
81	Polar Crane Fabricator Notice to Contractor of Girder Fabrication Completion - Unit 2	10/31/2012	Unit 2
82	Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 3	8/31/2013	Unit 3
83	Set Containment Vessel ring #1 for Unit 2	1/22/2013	Unit 2
84	Reactor Coolant Pump Fabricator Delivery of Casings to Port of Export - Unit 2	5/31/2012	Unit 2
85	Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 3	8/31/2013	Unit 3
86	Reactor Vessel Fabricator Notice to Contractor of Receipt of Core Shell Forging - Unit 3	9/30/2012	Unit 3
87	Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 3	Complete	
88	Set Nuclear Island structural module CA03 for Unit 2	5/14/2013	Unit 2
89	Squib Valve Fabricator Notice to Contractor of Completion of Assembly and Test for Squib Valve Hardware - Unit 2	11/30/2012	Unit 2
90	Accumulator Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	12/31/2012	Unit 3
91	Polar Crane Fabricator Notice to Contractor of Electric Panel Assembly Completion - Unit 2	3/31/2013	Unit 2
92	Start containment large bore pipe supports for Unit 2	8/2/2013	Unit 2

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
93	Integrated Head Package - Shipment of Equipment to Site - Unit 2	4/30/2013	Unit 2
94	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 2	5/31/2013	Unit 2
95	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 3	5/31/2013	Unit 3
96	Steam Generator Fabricator Notice to Contractor of Satisfactory Completion of 1st Steam Generator Hydrotest - Unit 2	12/31/2012	Unit 2
97	Start concrete fill of Nuclear Island structural modules CA01 and CA02 for Unit 2	11/20/2013	Unit 2
98	Passive Residual Heat Removal Heat Exchanger - Delivery of Equipment to Port of Entry - Unit 2	10/31/2012	Unit 2
99	Refueling Machine Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 2	8/31/2013	Unit 2
100	Deliver Reactor Vessel Internals to Port of Export - Unit 2	3/31/2014	Unit 2
101	Set Unit 2 Containment Vessel #3	3/28/2014	Unit 2
102	Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 2	5/31/2013	Unit 2
103	Turbine Generator Fabricator Notice to Contractor Turbine Generator Ready to Ship - Unit 2	10/31/2013	Unit 2
104	Pressurizer Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	2/28/2014	Unit 3

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
105	Polar Crane - Shipment of Equipment to Site - Unit 2	1/31/2014	Unit 2
106	Receive Unit 2 Reactor Vessel on site from fabricator	8/23/2012	Unit 2
107	Set Unit 2 Reactor Vessel	5/28/2014	Unit 2
108	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Channel Head to Tubesheet Assembly Welding - Unit 3	12/31/2013	Unit 3
109	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 3	8/31/2014	Unit 3
110	Reactor Coolant Pump - Shipment of Equipment to Site (2 Reactor Coolant Pumps) - Unit 2	10/31/2013	Unit 2
111	Place first nuclear concrete for Unit 3	7/1/2013	Unit 3
112	Set Unit 2 Steam Generator	9/9/2014	Unit 2
113	Main Transformers Ready to Ship - Unit 2	9/30/2013	Unit 2
114	Complete Unit 3 Steam Generator Hydrotest at fabricator	2/28/2014	Unit 3
115	Set Unit 2 Containment Vessel Bottom Head on basemat legs	6/28/2012	Unit 2
116	Set Unit 2 Pressurizer Vessel	1/13/2014	Unit 2

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
117	Reactor Coolant Pump Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 3	2/28/2015	Unit 3
118	Deliver Reactor Vessel Internals to Port of Export - Unit 3	6/30/2015	Unit 3
119	Main Transformers Fabricator Issue PO for Material - Unit 3	2/28/2015	Unit 3
120	Complete welding of Unit 2 Passive Residual Heat Removal System piping	12/18/2014	Unit 2
121	Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 3	4/30/2015	Unit 3
122	Refueling Machine - Shipment of Equipment to Site - Unit 3	5/31/2014	Unit 3
123	Set Unit 2 Polar Crane	1/20/2015	Unit 2
124	Reactor Coolant Pumps - Shipment of Equipment to Site - Unit 3	6/30/2015	Unit 3
125	Main Transformers Ready to Ship - Unit 3	7/31/2015	Unit 3
126	Spent Fuel Storage Rack - Shipment of Last Rack Module - Unit 3	12/31/2014	Unit 3
127	Start electrical cable pulling in Unit 2 Auxillary Building	9/25/2015	Unit 2
128	Complete Unit 2 Reactor Coolant System cold hydro	10/30/2015	Unit 2

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
129	Activate class 1E DC power in Unit 2 Auxiliary Building.	7/22/2014	Unit 2
130	Complete Unit 2 hot functional test.	3/11/2016	Unit 2
131	Install Unit 3 ring 3 for containment vessel	3/31/2015	Unit 3
132	Load Unit 2 nuclear fuel	6/30/2016	Unit 2
133	Unit 2 Substantial Completion	12/31/2016	Unit 2
134	Set Unit 3 Reactor Vessel	5/29/2015	Unit 3
135	Set Unit 3 Steam Generator #2	9/9/2015	Unit 3
136	Set Unit 3 Pressurizer Vessel	3/26/2015	Unit 3
137	Complete welding of Unit 3 Passive Residual Heat Removal System piping	12/18/2015	Unit 3
138	Set Unit 3 polar crane	1/20/2016	Unit 3
139	Start Unit 3 Shield Building roof slab rebar placement	1/25/2015	Unit 3
140	Start Unit 3 Auxiliary Building electrical cable pulling	12/12/2016	Unit 3

Exhibit 1
VC Summer Units 2 and 3

Tracking ID	Milestone Description	Revised Completion Date	Unit
141	Activate Unit 3 Auxiliary Building class 1E DC power	9/22/2015	Unit 3
142	Complete Unit 3 Reactor Coolant System cold hydro	1/1/2018	Unit 3
143	Complete Unit 3 hot functional test	2/15/2018	Unit 3
144	Complete Unit 3 nuclear fuel load	7/31/2018	Unit 3
145	Begin Unit 3 full power operation	1/1/2019	Unit 3
146	Unit 3 Substantial Completion	1/1/2019	Unit 3

Exhibit 2

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

**Actual through December 2011* plus
Projected**

		Actual					Projected						
	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Plant Cost Categories		CONFIDENTIAL											
Fixed with No Adjustment													
Firm with Fixed Adjustment A													
Firm with Fixed Adjustment B													
Firm with Indexed Adjustment													
Actual Craft Wages													
Non-Labor Costs													
Time & Materials													
Owners Costs													
Transmission Costs	333,921	-	26	724	927	11,189	58,197	32,021	50,294	44,128	74,004	48,983	13,428
Total Base Project Costs(2007 \$)	4,425,123	21,723	97,386	319,073	374,810	312,882	790,749	749,210	551,181	520,209	388,928	170,961	128,009
Total Project Escalation	1,122,514	-	3,519	20,930	23,741	36,177	156,848	203,613	172,606	197,120	166,402	79,467	62,093
Total Revised Project Cash Flow	5,547,637	21,723	100,905	340,003	398,551	349,058	947,597	952,822	723,787	717,329	555,330	250,428	190,102
Cumulative Project Cash Flow(Revised)		21,723	122,629	462,632	861,183	1,210,241	2,157,838	3,110,661	3,834,447	4,551,776	5,107,107	5,357,535	5,547,637
AFUDC(Capitalized Interest)	221,935	645	3,497	10,564	17,150	14,218	25,040	39,327	35,428	28,896	24,352	13,438	9,381
Gross Construction	5,769,572	22,368	104,403	350,567	415,701	363,276	972,637	992,150	759,215	746,225	579,683	263,867	199,483
Construction Work in Progress		22,368	126,771	477,338	893,039	1,256,315	2,228,951	3,221,101	3,980,316	4,726,540	5,306,223	5,570,089	5,769,572

*Applicable index escalation rates for 2011 are estimated. Escalation is subject to restatement when actual indices for 2011 are final.

Notes:

Current Period AFUDC rate applied

4.88%

Escalation rates vary from reporting period to reporting period according to the terms of Commission Order 2009-104(A). These projections reflect current escalation rates. Future changes in escalation rates could substantially change these projections. The AFUDC rate applied is the current SCE&G rate. AFUDC rates can vary with changes in market interest rates, SCE&G's embedded cost of capital, capitalization ratios, construction work in process, and SCE&G's short-term debt outstanding.

Exhibit 3

Change from SCPSC Order 2011-345

(Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Actual through December 2011* plus
Projected

Plant Cost Categories	Total	Actual					Projected						
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fixed with No Adjustment	(0)	-	-	-	-	(23,391)	28,286	(15,448)	7,140	3,190	97	42	84
Firm with Fixed Adjustment A	-	-	-	-	-	-	-	-	-	-	-	-	-
Firm with Fixed Adjustment B	5,863	-	-	-	-	(280)	3,653	1,980	(194)	495	210	-	(1)
Firm with Indexed Adjustment	42	-	-	-	-	(81,822)	12,914	15,697	8,598	64,220	(6,830)	(11,114)	(1,621)
Actual Craft Wages	(33,484)	-	-	-	(261)	(11,908)	8,014	(8,223)	(8,930)	(7,328)	(4,608)	(122)	(119)
Non-Labor Costs	33,483	-	-	-	(1,727)	10,052	(25,683)	29,840	310	4,675	9,893	4,284	1,840
Time & Materials	0	-	-	-	(21)	(700)	(698)	164	207	591	457	-	-
Owners Costs	136,485	-	-	-	(449)	(23,608)	17,747	36,218	40,442	6,707	35,509	9,383	14,536
Transmission Costs	12,330	-	-	-	43	3,937	50,422	19,926	20,472	8,892	30,969	(24,695)	(97,636)
Total Base Project Costs(2007 \$)	154,719	-	-	-	(2,415)	(127,720)	94,655	80,154	68,045	81,442	65,697	(22,222)	(82,917)
Total Project Escalation	(138,342)	-	-	-	2,414	(21,215)	(4,052)	920	(9,018)	8,283	(4,868)	(32,025)	(78,781)
Total Revised Project Cash Flow	16,378	-	-	-	(1)	(148,935)	90,604	81,074	59,027	89,725	60,829	(54,247)	(161,698)
Cumulative Project Cash Flow(Revised)		-	-	-	(1)	(148,936)	(58,332)	22,742	81,769	171,494	232,323	178,076	16,378
AFUDC(Capitalized Interest)	(33,748)	-	-	-	-	(9,970)	(7,058)	(3,232)	(2,157)	(1,835)	2,810	(4,123)	(8,183)
Gross Construction	(17,371)	-	-	-	(1)	(158,905)	83,546	77,843	56,871	87,889	63,639	(58,370)	(169,881)
Construction Work in Progress		-	-	-	(1)	(158,906)	(75,361)	2,482	59,353	147,242	210,881	152,511	(17,371)

*Applicable index escalation rates for 2011 are estimated. Escalation is subject to restatement when actual indices for 2011 are final. These projections reflect current escalation rates. Future changes in escalation rates could substantially change these projections.

** These funds were re-classified from contingency funds to specific budget categories.

Exhibit 4

RECONCILIATION TO ORDER No. 2011-345 AND BLRA INDICES COMPARISON

RECONCILIATION TO ORDER No. 2011-345(Thousands of \$)

Revised Forecast Current Filing	\$	5,769,572
Forecast Order No. 2011-345	\$	5,786,943
Change	\$	(17,371)

Reconciliation:

Change in Base Project Costs(2007 \$)	\$	154,719
Change in Project Escalation	\$	(138,342)
Change in AFUDC	\$	(33,748)
Net	\$	(17,371)

BLRA ESCALATION INDICES COMPARISON

BLRA Indices	Order No. 2011-345	July 2011 Update
	Escalation Rates	Escalation Rates
<u>HW All Steam Index:</u>		
One Year Rate	4.79%	4.75%
Five Year Average	5.31%	4.75%
Ten Year Average	4.53%	4.75%
<u>HW All Steam/Nuclear Index:</u>		
One Year Rate	4.60%	4.76%
Five Year Average	5.32%	4.76%
Ten Year Average	4.54%	4.76%
<u>HW All Transmission Plant Index:</u>		
One Year Rate	5.08%	4.84%
Five Year Average	5.23%	4.36%
Ten Year Average	4.69%	4.81%
<u>GDP Chained Price Index:</u>		
One Year Rate	0.43%	1.57%
Five Year Average	1.97%	1.59%